ITS

Dual coil indirect calorifier

ITS - 300/400/500/600/750/1000

Indirect water heater (calorifier) for a wide range of applications
• Single-wall spiral heat exchanger • PermaGlas® Ultra Coat™ second-generation glass coating technology prevents corrosion
• ITS 300: Three adjustable legs facilitate easy installation
• ITS 400-1000: Insulated ring base for easy installation
• Insulated access cover for comprehensive waterside maintenance
• Replaceable magnesium anode • Options: Flexible magnesium anode for installation in confined areas • Powered anode for reduced maintenance requirements • Temperature and pressure valve with stainless-steel spring set to 95 °C and a maximum water pressure of 7 bar • Analogue temperature gauge (0-120 °C)
• Electric element heat packs (3 - 36 kW) • Unvented kits
• Destratication pump kit

Innovation has a name.

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ITS

Technical specifications

		ITS 300	ITS 400	ITS 500	ITS 600	ITS 750	ITS 1000
Technical data							
Output solar coil	kW	46	52	68	72	80	87
Surface area solar coil	m²	1.45	1.64	2.13	2.39	2.66	2.89
Water capacity solar coil	l	9.5	9.9	12.8	20.3	22.6	24.6
Flow rate solar coil (80-60°C)	l/h	1978	2236	2924	3096	3440	3741
Pressure drop solar coil	mbar	44	78	166	37	50	61
Output primary coil	kW	27	37	42	40	56	58
Surface area primary coil	m²	0.85	1.15	1.31	1.33	1.86	1.93
Water capacity primary coil	l	5.7	6.9	7.9	11.3	15.8	16.4
Flow rate primary coil (80-60°C)	l/h	1161	1591	1806	1720	2408	2494
Pressure drop primary coil	mbar	12	30	43	7	18	20
Maximum working pressure tank	bar	10	10	10	10	10	10
Maximum working pressure coil	bar	16	16	16	16	16	16
Maximum operating temperature tank	°C	95	95	95	95	95	95
Maximum operating termperature coil	°C	110	110	110	110	110	110
Standby loss	kWh/24h	1.32	1.60	1.88	1.85	2.03	2.19
Anodes	-	1	1	1	1	1	1
Maximum weight	kg	422	527	666	887	980	1347
Draw-off capacity*							
Storage capacity	l	289	382	470	641	718	1007
30 min. ΔT=44°C	l	957	1200	1480	1684	1979	2374
60 min. ΔT=44°C	l	1671	2069	2555	2779	3309	3791
90 min. ΔT=44°C	l	2384	2939	3630	3873	4638	5208
120 min. ΔT=44°C	l	3098	3809	4705	4968	5967	6625
Continuous ΔT=44°C	l/h	1427	1740	2150	2189	2658	2834
Heating-up time ΔT=44°C	min.	12	13	13	18	16	21
30 min. ΔT=50°C	l	842	1056	1303	1482	1742	2089
60 min. ΔT=50°C	l	1470	1821	2249	2445	2912	3336
90 min. ΔT=50°C	l	2098	2586	3195	3409	4081	4583
120 min. ΔT=50°C	l	2726	3352	4141	4372	5251	5830
Continuous ΔT=50°C	l/h	1256	1531	1892	1926	2339	2494
Heating-up time ΔT=50°C	min.	14	15	15	20	18	24
30 min. ΔT=55°C	l	766	960	1184	1347	1584	1899
60 min. ΔT=55°C	l	1337	1655	2044	2223	2647	3033
90 min. ΔT=55°C	l	1907	2351	2904	3099	3710	4166
120 min. ΔT=55°C	l	2478	3047	3764	3974	4773	5300
Continuous ΔT=55°C	l/h	1141	1392	1720	1751	2127	2267
Heating-up time ΔT=55°C	min.	15	16	16	22	20	27
Shipping data							
Weight empty	kg	133	145	196	246	262	340
Weight incl. packaging	kg	144	156	207	257	273	352
Width packaging	mm	780	780	780	870	870	1010
Height packaging	mm	1510	1850	2150	1930	2150	2100
Depth packaging	mm	780	780	780	870	870	1010

* Draw-off capacity is based on both coils. This is not always possible.

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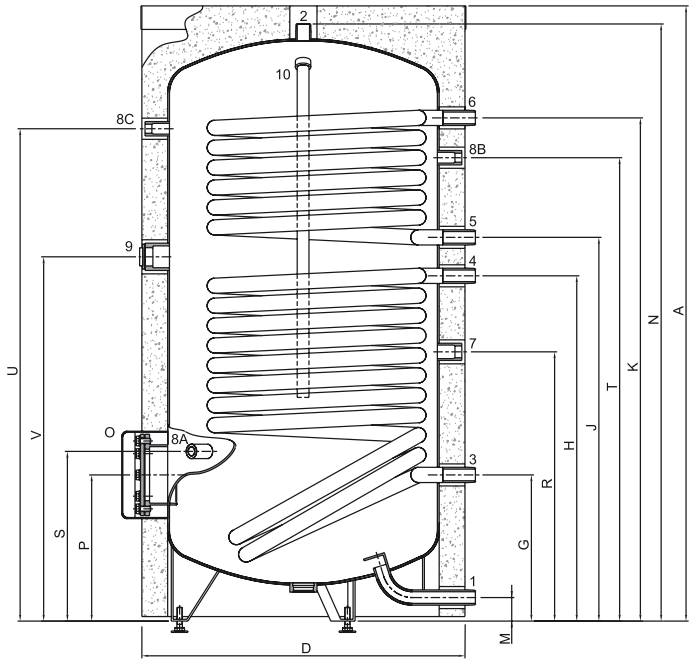
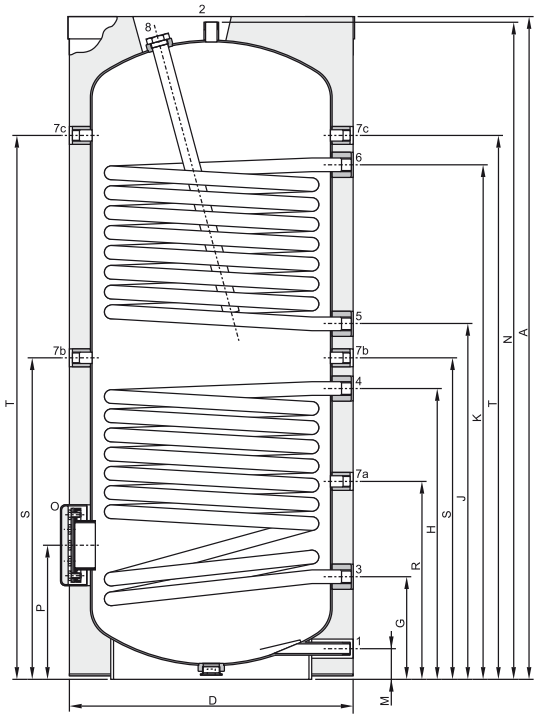
Dimensions

ITS 300



ITS 400-1000



		ITS 300	ITS 400	ITS 500	ITS 600	ITS 750	ITS 1000
A		1370	1705	2040	1835	2030	2000
D		720	720	720	910	910	1060
G		325	255	255	305	305	345
H		765	771	915	907	967	947
J		850	941	1085	1087	1147	1127
K		1110	1277	1469	1387	1567	1487
M		75	70	70	85	85	95
N		1310	1652	1990	1797	1992	1962
O		115	115	115	180	180	180
P		325	330	330	420	420	440
R		595	500	500	660	660	710
S		375	855	1000	1000	1065	1035
T		1025	1360	1700	1485	1680	1600
U		1115	-	-	-	-	-
V		800	-	-	-	-	-
1	Cold water	R1	R2	R2	R2 1/2	R2 1/2	R2 1/2
2	Hot water	R1	R2	R2	R2 1/2	R2 1/2	R2 1/2
3/4	Solar coil	R1	R1	R1	R1 1/4	R1 1/4	R1 1/4
5/6	Primary coil	R1	R1	R1	R1 1/4	R1 1/4	R1 1/4
7	Connection	Rp 3/4	Rp 3/4	Rp 3/4	Rp 3/4	Rp 3/4	Rp 3/4
8a+b+c	Connection	Rp 3/4	-	-	-	-	-
8	Anode connection	-	Rp1 1/4	Rp1 1/4	Rp1 1/4	Rp1 1/4	Rp1 1/4
10	Anode connection	R1	-	-	-	-	-

Dimensions in mm. All ITS dual coil calorifiers receive a three years warranty on the tank and one year on parts.

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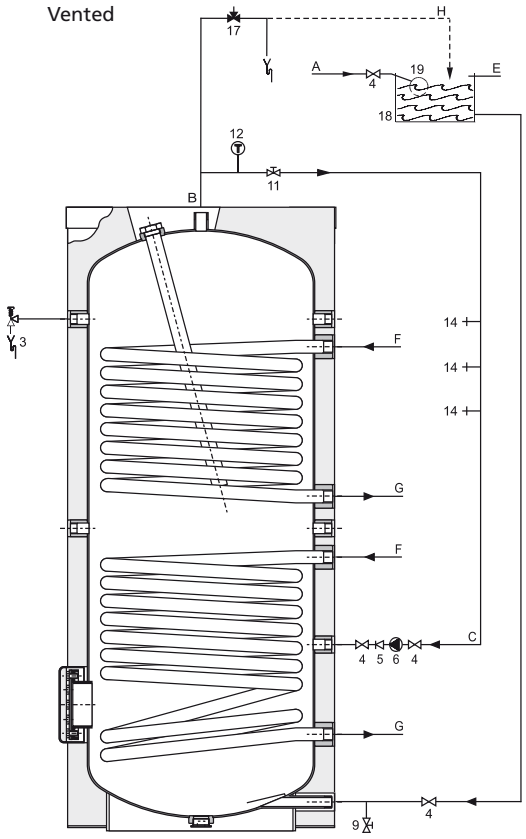
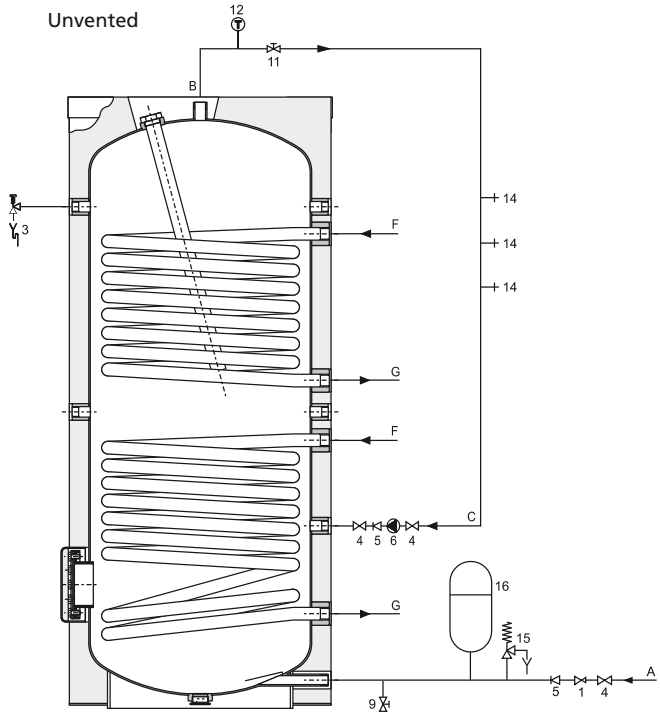
Installation diagrams

Vented



Unvented



1 Pressure reducing valve
3 T&P valve
4 Stop valve
5 Non-return valve
6 Circulation pump
9 Drain valve
11 Isolating valve
12 Temperature gauge
14 Hot water outlets
15 Expansion relief valve
16 Expansion vessel
17 Three way valve
18 Water tank
19 Float valve

A Cold water
B Hot water
C Return circulation
F Primary flow
G Primary return
E Over flow pipe
H Expansion vent pipe

A.O. Smith unvented system kits utilise combination valves.

Further installation and connection details can be found in the Installation & Commissioning Manual.

For the parts numbers of components please refer to the “Maintenance and accessories” chapter.

Data subject to change INT/0808/ITS/01
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